

# **PERBANDINGAN KEMAMPUAN PENALARAN DAN REPRESENTASI MATEMATIS, SERTA KEMANDIRIAN BELAJAR SISWA SMP ANTARA SISWA YANG MENGGUNAKAN PENDEKATAN SAINTIFIK DENGAN PENDEKATAN KONTEKSTUAL**

## **ABSTRAK**

Penelitian ini dilakukan pada salah satu SMP di kota Cimahi yang dikelompokkan kedalam dua kelas. Penelitian ini tidak menggunakan kelas secara acak, tetapi menerima keadaan subjek apa adanya. Oleh karena itu, penelitian ini menggunakan kuasi eksperimen dengan desain kelompok kontrol non ekuivalen. Desain penelitian ini adalah kelas eksperimen 1 memperoleh pembelajaran dengan pendekatan saintifik dan kelas eksperimen 2 memperoleh pembelajaran dengan pendekatan kontekstual. Analisis data dilakukan secara kuantitatif. Analisis kuantitatif dilakukan terhadap rerata gain ternormalisasi antara kedua kelompok dengan menggunakan uji-*t*. Hasil penelitian menunjukkan bahwa tidak terdapat perbedaan peningkatan kemampuan penalaran matematis siswa antara kelas eksperimen 1 dan eksperimen 2, namun terdapat perbedaan peningkatan kemampuan representasi matematis dan kemandirian belajar siswa antara kelas eksperimen 1 dan eksperimen 2.

**Kata kunci:** Penalaran Matematis, Representasi Matematis, Kemandirian Belajar.

# **COMPARISON OF ABILITY OF REASONING AND MATHEMATICAL REPRESENTATIONS AND JUNIOR HIGH SCHOOL STUDENTS INDEPENDENT LEARNING AMONG STUDENTS WHO USE A SCIENTIFIC APPROACH TO THE CONTEXTUAL APPROACH**

## **ABSTRACT**

The purpose of this study was to examine differences analyze of enhancement ability reasoning and matematical representation, and then difference of self regulation study between student who are got using learning scientific approach with student who are got learning using contextual approach. This research is doing at one of junior high school at Cimahi city which two classes including of classification. This research is'nt using random class, but accepting situation subject as it is. Therefore, this research is using quasi experiment with grouping design control non equivalent. This research design is one experiment class that got learning with scientific approach and two experiment class that got learning with contextual approach. Data analyze was doing by quantitative. The quantitative analyze was doing to gain average between two group by using t-test. The analyze result was showing if isn't got the difference upgrade ability mathematic analyze student between experiment of one class and experiment of two, but there are got difference upgrade ability representation of matematical and self regulation student learning between experiment of class one and experiment two.

**Keywords:** Mathematical Reasoning, Mathematical Representation, Self Regulation Learning.